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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,604	10/17/2003	Phillip Chang	MR1035-1326	8941
4586 7590 01/23/2007 ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			EXAMINER WEINTROP, ADAM S	
			ART UNIT 2112	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	
3 MONTHS			01/23/2007	
			DELIVERY MODE PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/686,604

Applicant(s)

CHANG, PHILLIP

Examiner

Adam S. Weintrop

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The use of the trademark CENTRINO has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

2. **Claim 19** is objected to because of the following informalities:

For claim 19, line 14 on page 17, the term "wireless devices" is plural and has only been defined in the singular form.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1-11, and 13-28** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For claim 1, in lines 12 and 9 on page 13, "the device" terms are vague as to which device previously defined the terms are referring to.

For claim 4, on line 1 on page 14, "the device" term is vague as to which device the term is referring to.

For claim 7, in line 9 on page 14, "the device" term is vague as to which device the term is referring to.

For claim 8, in line 13 on page 14, the term "the rechargeable battery" has not yet been defined.

For claim 9, line 16 on page 14, the term "the device" is vague as to which device the term is referring to.

For claim 10, line 1 on page 15, the term "the device" is vague as to which device the term is referring to.

For claim 11, line 6 on page 15, the term "the device" is vague as to which device the term is referring to.

For claim 13, on lines 18 and 20 on page 15 and line 2 on page 16, the terms "the device" is vague as to which device the terms are referring to.

For claim 16, on line 12 on page 16, the term "the device" is vague as to which device the term is referring to.

For claim 18, on line 2 on page 17, the term "the device" is vague as to which device the term is referring to.

For claim 19, on lines 10 and 15 on page 17, the terms "the device" is vague as to which device the terms are referring to.

For claim 24, on line 9 on page 18, the term “the device” is vague as to which device the term is referring to.

For claim 26, on line 16 on page 18, the term “the device” is vague as to which device the term is referring to.

For claim 27, on line 1 on page 19, the term “the device” is vague as to which device the term is referring to.

For claim 28, on line 6 on page 19, the term “the device” is vague as to which device the term is referring to.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1, 4-6, 8-12, 19, 22-23, and 25-28** are rejected under 35 U.S.C. 102(b) as being anticipated by Gernert et al. (EP 1 011 278 A2).

For claims 1 and 19, the claim requires a network adapter device for providing wireless connectivity to a network having an antenna, a radio frequency modem for receiving and sending data via the antenna, a baseband for providing a signal channel, a media access control for regulating traffic between the device and the wireless device, an Ethernet layer for communicating with the network, and a physical network connector to connect the device to the network. It also calls for a communication protocol adapter

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for providing network compatibility and a power source as required by claim 19. Gernert anticipates all of the limitations with his network adapter. Gernert discloses an antenna, a radio frequency modem, and a baseband in column 10, lines 7-8 with "transmitters/receivers 52 for radio communications to the mobile units". Having an antenna with a RF modem is inherent in wireless communications as an antenna is the broadcast provider to spread the wireless signal over the coverage area. Without an antenna, there can be no solid wireless communication. Using a baseband for radio communication is also inherent as that it is the frequency that wireless information is broadcast on, with the individual channels being small variances of the baseband frequency, such as 2.4 GHz for wireless internet. Wireless communication must be provided a baseband for it to transmit information. A media access control is disclosed in column 10, lines 10-13, where the MAC controls network traffic. An Ethernet layer and a network connector are discussed in column 13, lines 17-25, where Gernert describes the data ports the adapter can have. Having an IEEE 802.x LAN data port inherently would have an Ethernet layer, as all network protocols have a data link layer, and Ethernet is the data link layer in which 802.x communicates upon. Gernert also describes a network port with the "data port 96" that can physically connect the device to a network. As for claim 19, a communication protocol adapter is disclosed in column 11, lines 13-29, where Gernert describes that the device can be used with cable modems and requires a chip to control the data frame construction. This is equivalent to a protocol adapter, since different protocols use different frame lengths, and therefore would require a chip such as Gernert's to interface to different network protocols as a

cable modem protocol. The power source is disclosed in Figure 3 of Gernert at Power 56, which provides power to the network device.

For claims 4-6 and 22-23, the addition of a battery to power the device and the use of a rechargeable battery as required by claims 5 and 22, and the addition of recharging circuitry as required by claims 6 and 23, is anticipated by Gernert. In column 12, lines 53-54, Gernert uses Power 56 to provide mobile power to the device, and uses a Well 96 to recharge the power. This is equivalent to using a recharge circuit to provide recharge power to a battery to supply power to the device.

For claims 8 and 25, the addition of using a USB port for recharging the battery is implemented. Gernert anticipates this in column 13, lines 18-21, where Gernert discloses using a USB as the data port 96. The Data Port 96 is equivalent to the Well 96 of column 12, lines 53-54, in which the Well 96 provides recharging for the battery. Therefore, a USB port implemented as a Well, would provide battery charge for the device and anticipate claims 8 and 25.

For claims 9 and 26, the use of the device to add wireless communication to a non-wireless compatible device when the USB port is used on a non-wireless compatible device is claimed. Gernert discloses this use in column 13, lines 16-25. The use of a USB port is described with the application of connecting the device, which has wireless communication capability, to a wired LAN. This is equivalent to adding the device's wireless gateway described in column 10, lines 7-18, to a non-wireless compatible device, such as a wired LAN, thus providing wireless communication to the wired network device.

For claims 10 and 27, the addition of using the device as flash memory for storing data, accessible from the USB port by a computer is implemented. Gernert discloses this as well, in column 12, lines 53-57, where he describes after the device is placed in the Well 96, the information stored on it is accessible. The Well 96 can be a USB port according to column 13, lines 18-25, where the USB port can be used to network the device to computers. This is equivalent to using the USB port to access information stored on the device as required by claims 10 and 27.

For claims 11 and 28, the limitation of using a plurality of media access controls for regulating traffic between the device and multiple wireless devices is added. Gernert discloses this function in column 10, lines 21-24. Gernert describes using multiple MAC processors to accommodate different wireless standards, and therefore devices. This anticipates applicant's claims 11 and 28.

For claim 12, the claim calls for a portable self-powered network adapter that allows wireless devices to connect to a wired network. Gernert discloses this device in column 10, lines 7-9, with a device that has radio communications to mobile units. It is self-powered as described in column 12, lines 53-54, where Gernert discloses a mobile power source for the rechargeable battery. It can also connect to wired networks as described in column 13, lines 16-25, where Gernert describes that it can connect to wired LAN to transfer data. The device from Gernert anticipates applicant's claim 12.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 2, 7, 13, 15-18, 20, and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Gernert et al. (EP 1 011 278 A2) in view of Carter et al. (US 6,659,947 B1).

For claims 2, 7, 20, and 24, Gernert discloses all the limitations as described above except for using an RJ45 network port and providing power over the network as required by claims 7 and 24. The general concept of using an RJ45 port with networking devices and providing power over that port to power the devices is well known in the art as illustrated by Carter. Carter discloses an access point networking device which can be powered over the network in column 8, lines 17-19, and provides RJ45 networking ports as physical connections in column 8, lines 43-55. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Gernert to provide RJ45 ports and to power the device over the network as taught by Carter in order to increase compatibility for networking connections and also to use the available power over the network to not have to use a separate power supply, thus making the device contain less parts.

For claims 13, and 15-18, Gernert discloses all of the limitations as described above except for using an RJ45 network port for the physical network connection. The general concept of using an RJ45 port for physically connecting network devices together is well known in the art as illustrated by Carter. Carter discloses an access point with RJ45 connections in column 8, lines 43-55. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Gernert to provide RJ45 network connections as taught by Carter in order to provide greater compatibility for standard networking connections.

9. **Claims 3 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Gernert et al. (EP 1 011 278 A2) in view of Fong (US 6,211,737 B1).

For claims 3 and 21, Gernert discloses all of the limitations as described above except for using a sensitivity gain for adjusting coverage area. The general concept of using a sensitivity gain in wireless communications is well known in the art as illustrated by Fong. Fong discloses a variable gain amplifier and Fong describes that variable gain amplifiers are common to wireless devices in column 1, lines 12-19. The amplifiers are used in various parts of the devices. A gain amplifier can change the sensitivity of a wireless device by making the gain higher or lower, therefore adjusting the area covered. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Gernert with a sensitivity gain as taught by Fong in order to change the range of the device to allow the user to tune in weak signals.

10. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Gernert et al. (EP 1 011 278 A2) and Carter et al. (US 6,659,947 B1) above, and further in view of Fong (US 6,211,737 B1).

For claim 14, Gernert and Carter disclose all of the limitations as described above except for using a sensitivity gain for adjusting the coverage area. The general concept of using a sensitivity gain in wireless communications is well known in the art as illustrated by Fong. Fong discloses a variable gain amplifier and Fong describes that variable gain amplifiers are common to wireless devices in column 1, lines 12-19. The amplifiers are used in various parts of the devices. A gain amplifier can change the sensitivity of a wireless device by making the gain higher or lower, therefore adjusting the area covered. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Gernert and Carter with a sensitivity gain as taught by Fong in order to change the range of the device to allow the user to tune in weak signals.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam S. Weintrop whose telephone number is 571-270-1604. The examiner can normally be reached on Monday through Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules can be reached on 571-272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

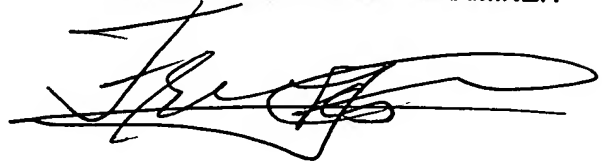
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AW

1/5/07

FRANTZ JULES
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Frantz Jules', is written over a horizontal line.

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